APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
SLOAN, NATHAN A

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _27 May 2003_ .

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under _Ex parte Quayle_, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _45-55_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _45-55_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐	Notice of References Cited (PTO-892)		4) ☐	Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐	Notice of Draftsperson's Patent Drawing Review (PTO-948)		5) ☐	Notice of Informal Patent Application (PTO-152)
3) ☐	Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .		6) ☐	Other: .

DETAILED ACTION

Response to Amendment

1.   In response to the previous Office Action, applicant cancelled claims 1-44 and

added new claims 45-55 to more particularly point out the present invention.

2.   Because applicant has failed to adequately traverse the Official Notice's taken for

claims 32, 43, and 44 regarding creation of an instance of a writer and control modules

and regarding updating an EPG in response to notification of a change, these statements

are taken to be admitted prior art.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 45-55 are rejected as being unpatentable over Usui et al. (6,075,570) in

view of Williams et al. (6,157,411).

With respect to claim 45, the claimed "system for receiving EPG data from one or

more EPG data providers in one or more data formats and for providing consolidated

EPG data available in a standardized format to one or more applications running on the

system" is met by Usui with reference to Figure 1. The claimed EPG services module for

"receiving EPG data from the one or more EPG data sources and providing consolidated

EPG data in a standardized format ..." is taught in column 8, lines 25-46 with EPG

receiver 6 of Figure 2. Receiving units taught in column 17, lines 4-22 receive EPG data

from a variety of sources and provide this to EPG receiver 6. With reference to Figure 8,

Receiver 6 inherently contains "one or more loader modules" to select equipment S31,

request data S32, "convert EPG data received from the EPG data provider from its native

format to a standardized format" S33, and store the data. The claimed writer module is

met by controller 204 of Figure 2, which collects EPG data from the various receiving

equipment and converts using translator 206 to store the data in common format

understood by EPG receiver 6. Commands to process and format data are stored in

EEPROM unit 206, taught in column 8, lines 46-50, providing a computer readable

medium carrying computer executable instructions. A user may then request "EPG data

from the one or more applications," which results in the EPG data being retrieved from

storage and returned as seen in Figure 11. This data is stored in a database within RAM

207 as noted above, and then read out in response to a user request, seen in Figure 9 step

S51 by controller 226 of Figure 5, claimed control module. This data is then provided to

generating circuit 227 which generates the data for display, which shows an interactive

application that allows the user to select items using a remote control seen in Figures 4 or

6.

Usui does not explicitly teach an application program interface configured to

provide "a standardized interface between the EPG control module and the one or more

applications requiring EPG data." Usui does teach that the controller interfaces with

receiving units to receive and format the data, but not explicitly that they are an API. Williams et al. teach the use of an API in column 6, lines 15-25. It would have been obvious for one skilled in the art at the time of the invention to include an API between the receivers and controller of Usui in order to allow a standard interface for receiving and processing data.

Furthermore, the limitation of the system being ably to add EPG providers, remove providers, *or* accommodate changes "without having to modify or update the code of any of the one or more applications" is claimed in the alternative and as such Usui meets this limitation by adding EPG providers as taught in column 17, lines 4-16. A plurality of devices may be added to the system as claimed to receive EPG data as seen in Figure 22. It is inherent that these devices may also be removed and the invention function the same way because they are merely additional sources of information and not essential to the execution of controller 204 storing EPG data in memory. Assuming this limitation was modified to read add providers, remove providers, *and* accommodate changes, examiner notes that the adding and removing of data sources without modifications to applications is notoriously well known in the art. For example, plug-and-play technologies to "hot swap" devices without updating software are well known using object oriented programming techniques.

The specific connection of one or more loader modules "with a separate EPG loader module for each EPG data source," is not explicitly taught. However, "loader modules" are inherently contained to retrieve data from each receiver as noted above. Instructions are provided to convert and format this data as necessary, but not use of a separate loader module for each source. As previously cited and uncontested by

applicant, examiner takes Official Notice that it is well known to create an instance of

module to interface with applications, such as in programming languages using object-

oriented architecture. It would have been obvious for one skilled in the art at the time of

the invention to modify the methods taught by Usui by creating a loader module for each

interface using well known programming techniques in order to provide a flexible, re-

programmable environment. This applies not only to providing separate loader modules,

but also to any "module" or C++ type class that allows easy adaptation of a system using

object oriented techniques such as inheritance, polymorphism, etc.

With respect to claims 46 and 47, the claimed writer module comprising computer

executable instructions for scaling EPG data according to at least one of "time, language,

richness, channels, and services" is taught by Usui as noted above by scaling EPG data to

be stored based on user conditions. In column 9, lines 10-20 these conditions are taught

to include program names or services, broadcast times, and broadcast channels as

claimed. The claimed factor including language is taught in column 6, lines 66-67 and

column 7, line 1. These factors then determine which EPG data to store, taught in

column 9, lines 22-40 with storing EPG data according to user defined factors in RAM

unit 207.

With respect to claim 48, the claimed writer module containing computer

executable instructions for "resolving conflicts between EPG data received from two or

more EPG data providers" is taught in column 11, lines 23-35 with comparing broadcast

names and programs from sources to determine if the programs need to be preserved as

different pieces of information, or if they are the same.

With respect to claim 49, the claimed loader modules comprising computer executable instructions "for implementing a priority scheme" is taught by Usui et al. with a step of making a selection as to which receiving equipment to select, seen in Figure 7 step S21. As seen in Figure 6, a user may select the EPG category to be received and displayed using equipment button 244 meeting the claimed "priority scheme." This then causes controller 204 to implement a selection for receiving, integrating, and displaying EPG data utilizing the processes seen in Figures 7 and 8.

With respect to claims 50 and 51, the claimed writer module comprising computer executable instructions "for limiting the amount of the EPG data that may be placed in the storage" is taught by managing memory associated with RAM 207. As taught in column 11, lines 43-51 EPG data may be deleted once viewed, meeting the claimed "removing expired EPG data from storage." The amount of memory contained in RAM 207 is inherently limited and by managing memory resources to efficiently store EPG data the limiting of data to be stored in RAM 207 memory is taught.

With respect to claim 52, the claimed writer module comprising computer executable instructions "for keeping the last EPG data stored to a particular portion of the storage" is met by keeping a history of EPG reception, taught in column 5, lines 59-63. This includes keeping the last information of EPG data stored when the power is turned off so the channel may be received again when power is turned back on.

With respect to claim 53, the claimed "storage is a database" is taught in column 10, lines 66-67 and column 11, lines 1-2.

With respect to claim 54, Usui teaches recording EPG data as noted above, teaches that input video signals are digital as claimed, and in column 15, lines 46-49 the recording of digital programming represented by EPG data using a VCR is taught.

With respect to claim 55, the claimed "EPG loader module is capable of being added to the device and removed from the device" is inherent to the invention. Clearly the receivers may be added to the device to form Usui's invention. As taught in column 17, lines 4-16 a plurality of devices may be added to the system as claimed to receive EPG data (Figure 22.) It is inherent that these devices may also be removed and the invention function the same way because they are merely additional sources of information and not essential to the execution of controller 204 storing EPG data in memory.

Conclusion

3.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than

SIX MONTHS from the date of this final action.

4.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Nathan A Sloan whose telephone number is (703)305-

8143. The examiner can normally be reached on Mon-Fri 7:30am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Miller can be reached on (703)305-4795. The fax phone numbers for

the organization where this application or proceeding is assigned are (703)746-9409 for

regular communications and (703)746-9409 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703)305-

4700.

NAS
August 3, 2003

JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600